

## CLAIMS

The invention claimed is:

1. A method for assigning indexes to one or more index-based resources, the method comprising:
  - providing an index-based-resource manager (IBRM);
  - providing a request for one or more indexes to be allocated to respective one or more resources;
  - directing said request to said IBRM;
  - identifying one or more indexes available to be allocated;
  - preventing said identified one or more indexes from being modified; and
  - allocating the identified indexes to be associated with said one or more resources.
2. The method of claim 1, wherein said one or more indexes are identifiers associated with said respective one or more resources.
3. The method of claim 2, wherein said one or more resources are network components of a computer network, including a communications network.
4. The method of claim 3, wherein said network components include one or more selections from the following:
  - a database table,
  - a data-routing component;
  - a switching component; and/or

a signal-transfer component.

5. The method of claim 3, wherein identifying one or more indexes includes querying a data storage device that houses resource information related to said one or more resources; wherein said resource information includes an indication as to whether an available index is currently in use.

6. The method of claim 5, wherein identifying one or more indexes comprises beginning a search for said one or more indexes from a predetermined index location.

7. The method of claim 5, wherein identifying one or more indexes comprises selecting said one or more indexes from a predetermined range of indexes.

8. The method of claim 1, further comprising deallocating one or more indexes.

9. One or more computer-readable media having computer-useable instructions embodied thereon for performing the method of claim 1.

10. One or more computer-readable media having computer-useable instructions embodied thereon for performing a method of managing resource indexes in a communications networking environment, the method comprising:

receiving one or more requests to identify one or more indexes available for allocation; wherein said indexes are to be respectively associated with one or more network resources;

querying a data-storage component to identify a set of available indexes consistent with said request(s);

denoting the identified indexes as unavailable for subsequent allocation;  
and  
communicating said identified indexes to a requesting component.

11. The media of claim 10, wherein said network resources include one or more selections from the following:

a network element; including a switch, a router, a signal-transfer point, a computer-processing component, or an office facility;  
a database table; and/or  
a call-routing path.

12. The media of claim 11, wherein querying said data-storage component includes providing a count parameter to denote a number of requested indexes.

13. The media of claim 12, further comprising:

receiving an indication that all or a portion of the one or more identified indexes were successfully allocated to said respective one or more network resources; and

indicating that the one or more identified indexes were successfully allocated.

14. The media of claim 12, further comprising receiving an indication that all or a portion of the one or more identified indexes were not able to be allocated to said respective one or more network resources.

15. The media of claim 14, further comprising deallocating the all or a portion of the one or more identified indexes.

16. The media of claim 15, wherein deallocating the all or a portion of the one or more identified indexes includes removing the denotation that the indexes are unavailable for subsequent allocation, whereby the all or a portion of the one or more identified indexes are available for subsequent allocation.

17. A system for preventing duplicate resource-index assignments in a communications networking environment, the system comprising:

- an index-based-resource manager (IBRM) for receiving requests to manipulate indexes associated with one or more network resources;

- a data store coupled to said IBRM;

- a user interface coupled to said IBRM for communicating index data associated with manipulating said indexes.

18. The system of claim 17, wherein said network resources include one or more selections from the following: a communications pathway, a database component, a hardware element, or a logical data representation.

19. The system of claim 18, wherein said IBRM includes a first set of computer-useable instructions embodied on one or more computer-readable media that:

- queries said data store incident to a request to manipulate one or more of said indexes;

- identifies a set of indexes consistent with said query; and

communicates an indication of said identified indexes to a requesting component.

20. The system of claim 19, wherein said IBRM houses said indexes.

21. The system of claim 20, wherein manipulating said indexes includes allocating indexes to one or more resources.

22. The system of claim 21, wherein manipulating said indexes includes deallocating indexes to one or more resources.

23. A method for allocating indexes to resources, comprising employing the system of claim 17.